

PATCH BOARDS

BULLETIN
NO. CP3165

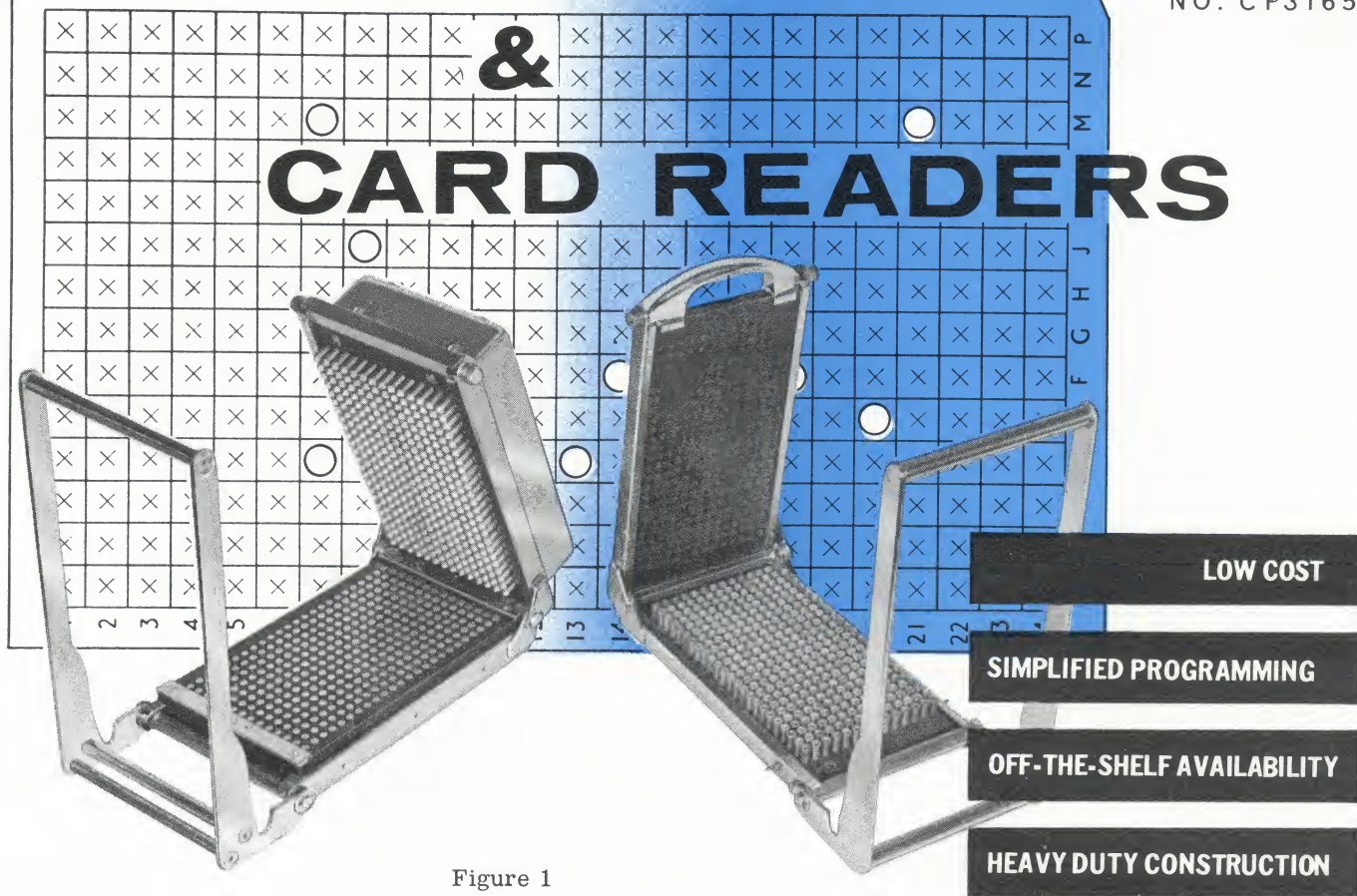


Figure 1

GENERAL

Tenor Card Readers and Patchboards are simple low cost, heavy duty, programming components, available in a wide variety of sizes from the standard 336 point to over 2000 point units.

The Card Readers consist of two matrix arrays of contacts; mounted in a hinged frame which holds them in opposing positions with the contacts aligned. The card fits into a slot, between the contact arrays to prevent the contacts from meeting. Electrical continuity between a set of contacts occurs where a hole has been punched in the card.

The Patchboards consist of a single matrix array of contacts, mounted in a hinged frame, opposed by a removable insulating board which has been perforated to accept patchcord plugs. Operation of the contacts occur when a patchcord plug is inserted into the insulating board, and the device has been closed to permit the plug to meet a contact electrically completing this circuit.

UNIQUE FEATURES

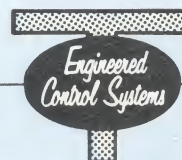
- Contact points readily accessible for quick easy inspection.
- Pointed cone contacts for dependable operation.
- Positive contact to contact wiping action.
- Coil spring loaded contacts for long dependable service.
- High current capability.
- Card reader utilizes durable wear and soil resistant plastic card.
- Three types of wire attachment.
- Capable of reading all contact points.
- Easiest to install and wire.
- Low contact resistance.
- Gold plated contacts available.

TENOR *Company*

13460 W. SILVER SPRING DRIVE

BUTLER, WISCONSIN 53007

Phone 1-414-781-4800



PATCH BOARDS

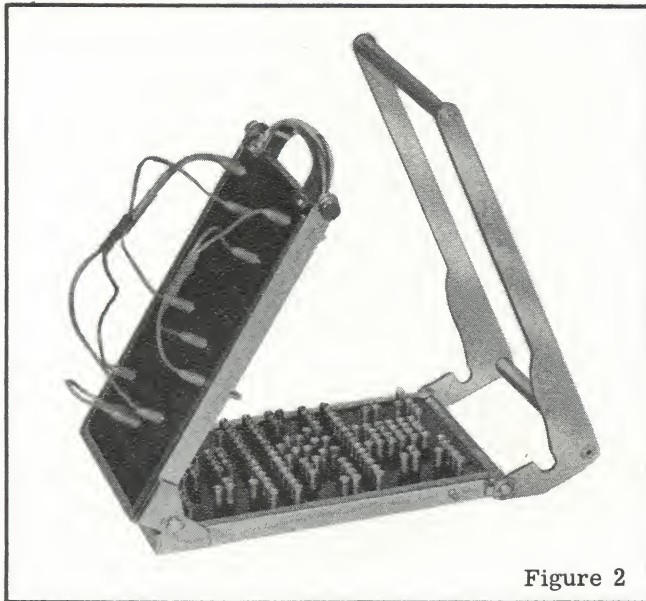


Figure 2

Special patchboards are available in a variety of configurations.



Figure 3

PATCH CORDS

	1 : 1
	1 : 2
	1 : 3
	1 : 4
	2 : 2

Figure 4

Patchcords are available in various combinations of terminations:

Example - A 2-way at one end to a 3-way at the other end is a 2:3.

A variety of wire lengths are available in multiples of 1 inch.

A variety of wire colors are available, including: Black, Blue, Green, Grey and Orange.

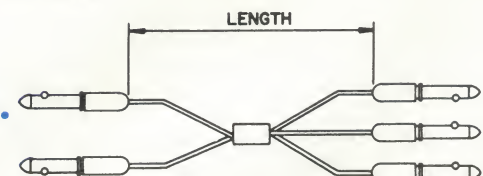


Figure 5

Contact TENOR COMPANY for additional information.

PATCH CORD PLUGS

Patchcord plug locking:

A spring loaded ball lock remains extended in the lock position as long as the terminal tip is in contact. When the tip is removed from contact, spring compression is eased, the ball lock releases as the plug is removed from the patchboard.

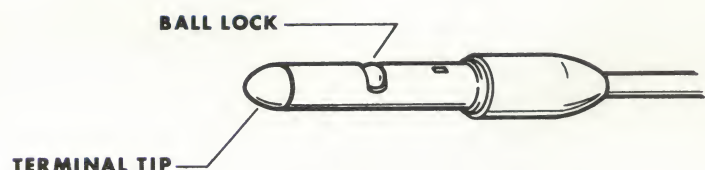


Figure 6

PROGRAMMING

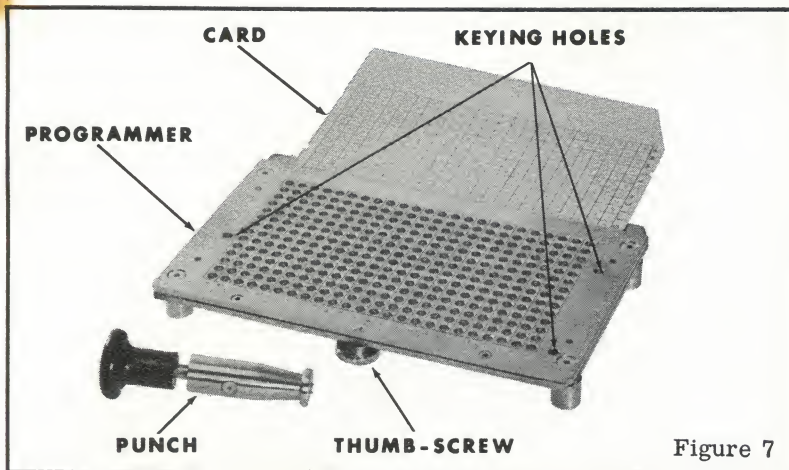


Figure 7

Easy - Rapid Programming:

- 1 - Insert card
- 2 - Tighten thumb-screw
- 3 - Use program punch to key card
- 4 - Punch program as desired

OPERATING THE CARD READER IS A SIMPLE PROCEDURE:

- 1 - Insert the programmed card above the fixed contact tray.
- 2 - Swing the movable contact tray into position over the card.
- 3 - Lock the assembly together by swinging the locking handle over the cover assembly.

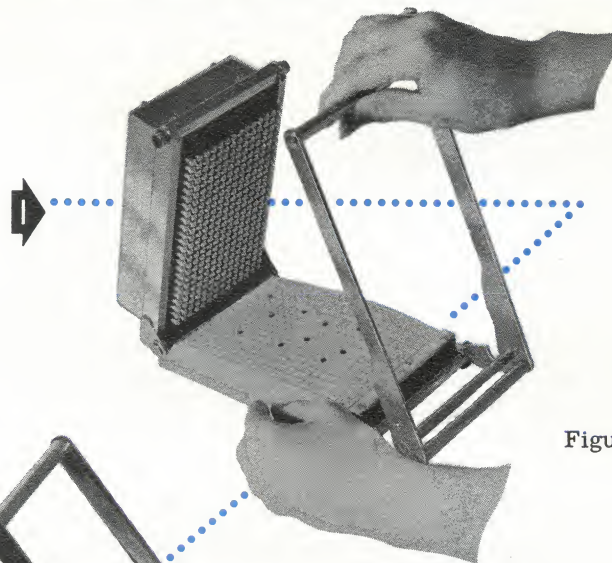


Figure 8

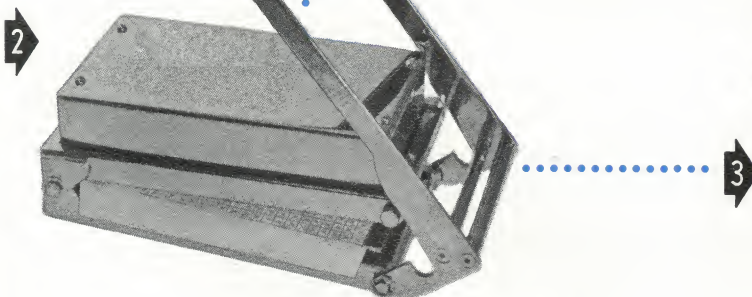


Figure 9

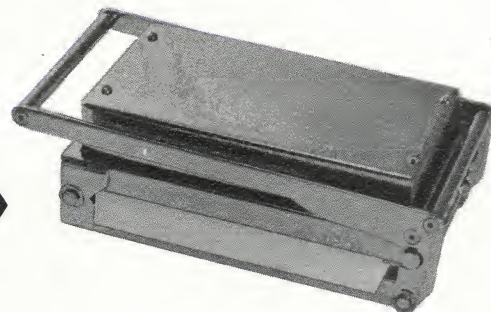


Figure 10

CONNECTION TO CARD READER CONTACTS

Electrical connection to card reader contacts can be made by use of a formed pin, fitted taper pin, or a simple solder joint.

The formed pins or taper pins can be supplied by the Tenor Company.

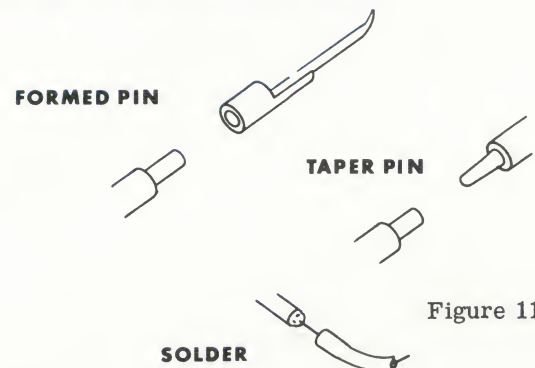


Figure 11

SPECIFICATIONS

GENERAL

MATERIALS:

COVERS: Chrome Plated Steel
 FRAME: Chrome Plated Steel
 CONTACT BOARD: Paper Based Technical Plastic
 CONTACT SPRINGS: Stainless Steel
 CONTACT MATERIAL: Brass, Copper and Silver Plated*

* Note: Gold Plating available over silver on special order.

ELECTRICAL

MAX. OPERATING VOLTAGE: 250V.
 MAX. OPERATING CURRENT: 5 AMPS
 CAPACITANCE BETWEEN ADJACENT CIRCUITS: 2 picofarads
 INSULATION RESISTANCE: 5×10^{11} Ohms

CONTACT RESISTANCE:

CARD READER: 1. 1-1.2 milliohms
 PATCH BOARD: 1.5 milliohms
 18 milliohms +1 milliohm per inch of patchwire

MATRIX CONFIGURATION

PATCHBOARDS AND CARD READERS:

POINTS	MATRIX
336 Way	14 x 24
400 Way	20 x 20
500 Way	20 x 25
600 Way	20 x 30
600 Way	30 x 20
700 Way	20 x 35
750 Way	30 x 25
800 Way	20 x 40
900 Way	30 x 30
1000 Way	40 x 25
1050 Way	30 x 35
1200 Way	30 x 40
1200 Way	40 x 30
1400 Way	40 x 35
1600 Way	40 x 40
2400 Way	2(50 x 24)

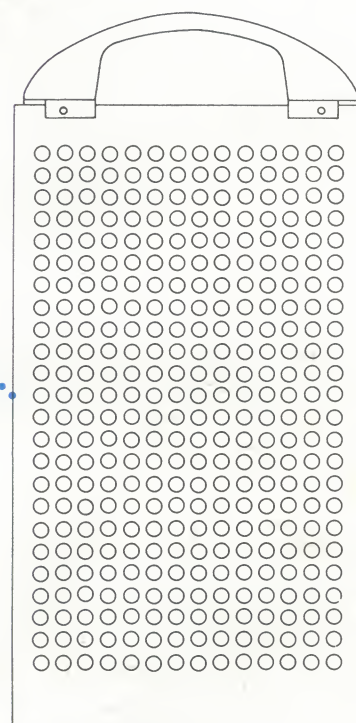
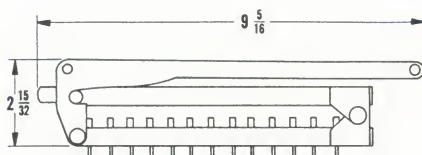
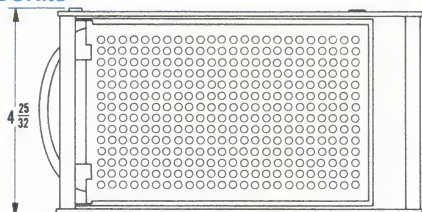


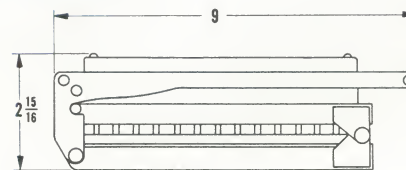
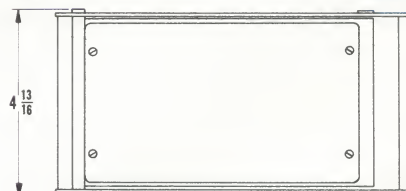
Figure 12

DIMENSIONAL INFORMATION

PATCH BOARD



CARD READERS



* These are nominal dimensions for the 336 way units.

Figure 13



13460 W. SILVER SPRING DRIVE • BUTLER, WISCONSIN 53007 • PHONE 1-414-781-4800

Dear Sir:

In response to your recent inquiry, we are enclosing Bulletin CP-3165 covering the Tenor Card and Patch Board Programmers.

The Card Programmer has many outstanding features. Some of them that we would like to bring to your attention are:

1. Ruggedly built for industrial applications with a frame of chrome plated steel.
2. Contacts - Silver plated. Gold plating optionally available.
3. The upper, spring loaded, cone shaped contacts seat against the bottom flat contacts for positive connection and low contact resistance (1.5 milliohm).
4. Contacts have a wiping action as the Programmer is closed.
5. Uses a durable plastic card.
6. Programming is by simple hand tools.
7. Available in a wide range of sizes. 336 contacts to 2400 contacts.
8. Inexpensive. Example - 336 Contact Model - \$375.

Shortly, we will have available an applications bulletin. If you would like a copy please let us know. In the meantime if you have a programming problem please contact us or our Representative in your area.

Yours very truly,

TENOR COMPANY

Ralph T. Turnbull

Ralph T. Turnbull
Sales Manager

RTT/bj
Enc. 1